

NOVELTIES AND NEW COMBINATIONS IN MACHAERANTHERA
(ASTERACEAE - ASTEREAEE)

B. L. Turner

Department of Botany, The University of Texas, Austin 78713

In connection with a forth-coming systematic treatment of the series Variabiles and Verae of the genus Machaeranthera (sensu Cronquist and Keck, 1957) the following novelties and new combinations are deemed appropriate.

MACHAERANTHERA ASTEROIDES var. GLANDULOSA B. L. Turner, var. nov.

M. a. var. asteroides accedens sed capitulis minoribus, phyllariis brevioribus, pilis paucioribus, et vestimento prominentibus trichomatibus glandularibus.

Resembling M. a. var. asteroides but differing in its smaller heads with shorter less pubescent involucre bracts and prominent vestiture of glandular trichomes.

TYPE: UNITED STATES. ARIZONA: Maricopa Co., 2.6 mi E of Queen Creek Tunnel, 4200 ft, 19 Sep 1975, Pinkava, Keil & Lehto LI8904 (holotype LL; isotypes ASU, CSU, NY).

The variety is abundant at lower elevations in central Arizona and grades into the var. asteroides southward. The latter is readily distinguished by its densely puberulent vestiture, larger heads with more numerous ray florets and generally broader leaves.

MACHAERANTHERA ASTEROIDES var. LAGUNENSIS (Keck) B. L. Turner, comb. nov.

based upon Machaeranthera lagunensis Keck, Brittonia 9: 238. 1957.

MACHAERANTHERA BIGELOVII var. COMMIXTA (Greene) B. L. Turner, comb. nov.

based upon Machaeranthera commixta Greene, Pittonia 4: 71. 1899.

MACHAERANTHERA CANESCENS var. AMBIGUA, B. L. Turner, var. nov.

M. c. var. canescens accedens sed capitulis magnioribus, phyllariis adpressis tantum pubescentibus, achaeniis saepe glabris.

Resembling M. c. var. canescens, but differing in its larger heads and appressed, merely pubescent, involucre bracts and mostly glabrous achenes.

TYPE: UNITED STATES. ARIZONA: Coconino Co., Flagstaff, 28 Aug 1922, H. Hanson A7 (holotype TEX; isotypes ARIZ, F, MO, NEB, NY, OSU, PHIL, RM, TEX).

Representative Specimens (from among 300 or more): UNITED STATES. ARIZONA: Apache Co.: 15 mi W Window Rock, 1 Sep 1962, Turner (TEX). Coconino Co.: E slopes San Francisco Peaks, 8000 ft, 27 Sep 1939, Cutler 3117 (DS, GH, MO, NDG, NY); E of Flagstaff, 4 Sep 1940, Heller 15795 (DS, MO, NY, PHIL, UC, US, WSU); 5 mi S Grand Canyon Natl. Park, highway 64, 11 Sep 1940, Heller 15821 (DS, MO, NY, PHIL, WSU); 10 mi W Flagstaff, 14 Aug 1946, Parker et al. 6158 (ARIZ, DS, LL, US, UTC); near Flagstaff, May-Oct 1900, Purpus 8096 (MO, POM, UC, US); Rowe's Well, Rim of Grand Canyon, 5 Nov 1899, Ward 10 (NY, RM, US). Navajo Co.: just W of Heber on road to Payson, 28 Aug 1973, Sexton s.n. (ASU). Yavapai Co.: 30 mi S Flagstaff, 19 Oct 1982, Neese 12508 (BYU, NY).

MACHAERANTHERA CANESCENS var. ARISTATA (Eastwood) B. L. Turner, comb. nov.

based upon Aster canescens var. aristatus Eastwood, Proc. Calif. Acad. Sci., Ser. 2, 6: 296. 1896.

MACHAERANTHERA CANESCENS var. NEBRASKANA, B. L. Turner, var. nov.

M. c. var. canescens accedens sed plantis altioribus erectioribus rigidioribus, involucris magnioribus 0.9-1.5 cm altis, phyllariis 8-9-seriatis, floribus radiatis saepe plurioribus.

Differing from M. c. var. canescens in being taller, more stiffly erect, with larger, 8-9 seriate, involucre (0.9-1.5 cm high) with generally more numerous ray florets.

TYPE: UNITED STATES. NEBRASKA: Sheridan Co.: 2 mi E Ellsworth, sandhill prairie on dry loose sand, 27 Aug 1968, Steve Stephens 28037 (holotype NY!; isotypes ARIZ!, DS!, GH!).

This taxon is largely confined to Nebraska and has been treated by some authors as M. sessiliflora, but the latter name applies to populations along the Snake River in Idaho, as noted below.

MACHAERANTHERA CANESCENS var. sessiliflora (Nutt.) B. L. Turner, comb. nov.

based upon Dieteria sessiliflora Nutt., Trans. Amer. Phil. Soc., Ser. 2, 7: 301. 1840.

The type of this heretofore problematical name was believed by at least a few authors to have been collected on the east slopes of the Rocky Mountains. My studies strongly suggest that type material was collected by Nuttall along the Snake River during his excursion to Oregon in 1836.

MACHAERANTHERA CANESCENS var. SHASTENSIS (A. Gray) B. L. Turner, comb. nov.

based upon Machaeranthera shastensis A. Gray, Proc. Amer. Acad. Arts 6: 539. 1865.

MACHAERANTHERA CANESCENS var. ZIEGLERI (Munz) B. L. Turner, comb. nov.

based upon Machaeranthera canescens subsp. zieglerei Munz, Aliso 7: 65. 1969.

In my treatment Machaeranthera canescens is composed of ten, largely allopatric, intergrading taxa which will be arranged in two or more subspecies.

LITERATURE CITED

Cronquist, A. and D. D. Keck. 1957. A reconstitution of the genus Machaeranthera. Brittonia 9: 231-239.